

IN THE CLAIMS

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Claims 1-61 (canceled)

62. (currently amended) A process for preparing an electrosterically stabilized polyurethane dispersion comprising

a) preparing a hydrophilic and solvent-free macromonomer (A)(ii) with monomodal molecular mass distribution by

a₁) reacting 50 to 100 parts by weight of a hydrophilic alkyl- or arylpolyalkylene glycol (A)(i) with 1 to 100 parts by weight of a polyisocyanate component (B)(i), optionally in the presence of a catalyst, in the absence of solvents, the reaction conditions and the selectivities of components (A)(i) and (B)(i) being chosen such that only one isocyanate group of component (B)(i) reacts with component (A)(i), and subsequently

a₂) reacting the uniform preadduct from stage a₁) completely with 0.5 to 200 parts by weight of a compound (C) having two or more primary amino groups, secondary amino groups or hydroxyl groups which are reactive toward isocyanate groups and having a molecular mass of 50 to 500 daltons, in the absence of solvents, the reaction conditions and the selectivity of component (C) being chosen such that only one reactive group of component (C) reacts with the free isocyanate group(s) of the preadduct, and

b) preparing the polyurethane dispersion by

b₁) reacting 2 to 50 parts by weight of the hydrophilic and solvent-free macromonomer (A)(ii) with 25 to 250 parts by weight of the polyisocyanate component (B)(i), optionally in the presence of 0 to 50 parts by weight of a solvent component (D) and also of a catalyst,

b₂) reacting the polyurethane preadduct from stage b₁) with 50 to 100 parts by weight of a polymeric polyol (A)(iii) and optionally with 0.5 to 10 parts by weight of a low molecular mass polyol component (A)(iv), optionally in the presence of a catalyst,

b₃) reacting the homogeneous polyurethane preadduct from stage b₂) with 2 to 20 parts by weight of a polyol component (A)(v), optionally in the presence of a catalyst,

b₄) admixing the homogeneous polyurethane prepolymer from stage b₃), before or during dispersion in 50 to 1500 parts by weight of water, with 2 to 20 parts by weight of a neutralizing component (E),

b₅) dispersing the optionally (partially) neutralized polyurethane prepolymer from stage b₄) in 50 to 1500 parts by weight of water, which optionally further contains 0 to 100 parts by weight of a formulating component (F), and finally

b₆) reacting the (partially) neutralized polyurethane prepolymer dispersion from stage b₅) with 3 to 60 parts by weight of a chain extender component (G) and also, subsequently or simultaneously, with 0 to 30 parts by weight of a chain stopper component (H).

63. (previously presented) The process of claim 62, wherein in reaction stage a₁) component (B)(i) is metered into component (A)(i), or component (A)(i) is metered into component (B)(i).

64. (previously presented) The process of claim 62, wherein reaction stages a₁) and a₂) are carried out at a temperature of 10 to 30°C.

65. (previously presented) The process of claim 62, wherein reaction stages b₁), b₂) and b₃) are carried out at a temperature of 60 to 120°C.

66. (previously presented) The process of claim 62, wherein reaction stages b₄) and b₅) are carried out at a temperature of 40 to 60°C.

67. (previously presented) The process of claim 62, wherein reaction stage b₆) is carried out at 30 to 50°C.

68. (previously presented) The process of claim 62, wherein following reaction stage b₆) any free NCO groups still present are completely chain-extended with water.

Claims 69-85 (canceled)